

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1-19. (Cancelled)

20. (Currently Amended) A phase-change memory device comprising:

- (a) a lower dielectric layer;
- (b) a lower phase-change resistor, at least a part of the lateral surface of the lower phase-change resistor being surrounded by the lower dielectric layer; and
- (c) a thin-dielectric layer covering at least a part of the top surface of the lower phase-change resistor and including a pore having smaller area than the top surface of the lower phase-change resistor, ~~aligned to the top surface of the lower phase change resistor and extending to the top surface of the lower phase change resistor;~~ and
- (d) an upper phase-change resistor filling the pore, extending to cover at least a part of the top surface of the dielectric layer and contacting with the lower phase-change resistor through the pore.

21. (Cancelled)

22. (Currently Amended) The phase-change memory device as set forth in claim ~~16-20~~, further comprising:

- (d) ~~an upper phase change resistor filling the pore and formed on the thin dielectric layer~~ wherein the pore is aligned to the top surface of the lower phase-change resistor.

23. (Currently Amended) A phase-change memory device comprising:

- (a) ~~a lower dielectric layer;~~

(b)(a) a lower phase-change resistor, at least a part of the lateral surface of the lower phase-change resistor being surrounded by ~~the~~ a lower dielectric layer; and

(e)(b) a ~~thin~~ dielectric layer covering at least a part of the top surface of the lower phase-change resistor and including a damaged spot pore aligned to the top surface of the lower phase-change resistor, the pore having smaller area than the top surface of the lower phase-change resistor, aligned to the top surface of the lower phase-change resistor and providing a current path to the top surface of the lower phase-change resistor;; and

(d)(c) an upper phase-change resistor filling the pore, extending to cover at least a part of the top surface of the dielectric layer and contacting with the lower phase-change resistor through the pore.

24-25. (Cancelled)